



## Level 1 Validation Certificate

This document verifies that the Level 1 Validation process was completed. The session details and audit review outcomes are included here.

*This certificate is required for submission – alongside the Level 1 validated water audit software file – to the California Department of Water Resources.*

Call Date: 8/20/2020

### Water Supplier

Supplier Name:	Carlsbad Municipal Water District
Supplier Participants:	Mario Remillard, Andrew Wilson, Mika Imoto, Eric Sanders, Matt Jacobs, Shoshana Aguilar

### Key Audit Metrics

Data Validity Score:	75	
ILI:	0.52	
Real Loss:	9.48	gal / conn / day
Apparent Loss:	8.35	gal / conn / day
Non-Revenue Water as Percent of Cost of Operating System:	2.4%	

### Validator

Validator:	Isabel Szendrey, Water Systems Optimization
Validator Qualifications:	Water Audit Validator Certificate from the AWWA California Nevada Section

### Certification Statement by Validator

This water loss audit report has been Level 1 validated per the requirements of California Code of Regulations Title 23, Division 2, Chapter 7 and the California Water Code Section 10608.34.

All recommendations on volume derivation and Data Validity Grades were incorporated into the water audit. ☒

*If not, rejected recommendations are included here.*

## Level 1 Validation – Water Supplier Confirmation

This document confirms participation in and endorsement of the Level 1 Validation as completed.

*This acknowledgement is required for submission – alongside your Level 1 validated water audit software file – to the California Department of Water Resources.*

Water Supplier Name: Carlsbad Municipal Water District

Water Supplier Public Water System ID: 3710005

Water Audit Period: 1/2019 – 12/2019

### Water Audit & Water Loss Improvement Steps

*Steps taken in the audit period timeframe to increase data source accuracy, reduce real losses, and/or reduce apparent losses, as informed by the water audit.*

The Carlsbad Municipal Water District has maintained accuracy in water supply meters. Tested customer water meters. Upgraded our Utility Billing System and continue to use an Advanced Metering Infrastructure (AMI) system to monitor system and customer use. CMWD also has maintained good record keeping of distribution system mains and valves and documents all leaks and breaks.

### Certification Statement by Water Supplier Executive:

This water loss audit report meets the requirements of California Code of Regulations Title 23, Division 2, Chapter 7 and the California Water Code Section 10608.34 and has been prepared in accordance with the method adopted by the American Water Works Association, as contained in their manual, *Water Audits and Loss Control Programs, Manual M36, Fourth Edition* and in the Free Water Audit Software version 5.

Executive Name (print): Vicki Quiram

Executive Position: Utilities Director

Signature:



Date

August 27, 2020